

**WHAT IS CLAIMED IS:**

1. A method of manufacturing a tiled display comprising the steps of:
  - 5 a) selecting a plurality of flat-panel displays, each flat-panel display having a display area comprising a plurality of pixels arranged in an array and having at least one defective pixel;
  - b) forming a tiled display by locating one or more faceplates in alignment with the plurality of flat-panel displays, the one or more faceplates
- 10 having a plurality of lightpipes in an array, the lightpipes having input and output end faces for transmitting light from the display areas of the flat-panel displays to a display surface of the tiled display, wherein the input end face of each of the lightpipes has an area larger than the area of one pixel of the selected flat-panel displays, and wherein each lightpipe transmits light from more than one pixel from the display area of the flat-panel displays to the display surface of the tiled display.
- 15
2. The method claimed in claim 1, wherein the display areas of the flat-panel displays have a first size, and wherein the lightpipes transmit light from the display areas to a display surface of the tiled display having a second size
- 20 larger than that of the display areas of the flat-panel displays.
3. The method claimed in claim 2, wherein the display surface of the tiled display is parallel to the display areas of the flat-panel displays.
- 25 4. The method claimed in claim 1, wherein the tiled display is formed by locating individual faceplates in alignment with each selected flat-panel display, and aligning adjacent edges of the individual faceplates in an array.
5. The method claimed in claim 4 wherein aligned adjacent edges
- 30 of the faceplates are inter-digitated in at least one dimension.

6. The method claimed in claim 5 wherein the aligned adjacent edges of the faceplates are inter-digitated in two dimensions.

7. The method claimed in claim 5 wherein the aligned adjacent edges of the faceplates are inter-digitated in at least one dimension by more than one row or column.

8. The method claimed in claim 1, wherein the tiled display is formed by locating multiple selected flat-panel displays in alignment with a single faceplate.

9. The method claimed in claim 8, wherein lightpipes transmitting light from pixel elements along adjacent edges of the flat panel displays are inter-digitated at the display surface of the tiled display in at least one dimension.

15

10. The method claimed in claim 9 wherein the lightpipes transmitting light from pixel elements along adjacent edges of the flat panel displays are inter-digitated at the display surface of the tiled display in two dimensions.

20

11. The method claimed in claim 9 wherein lightpipes transmitting light from pixel elements along adjacent edges of the flat panel displays are inter-digitated at the display surface of the tiled display in at least one dimension by more than one row or column.

25

12. The method claimed in claim 1 wherein the defective pixels are defective in color and/or brightness.

30 13. The method claimed in claim 1 further including the step of providing a controller for correcting the light output of each lightpipe to a common brightness, color, and dynamic range.

14. The method claimed in claim 1 wherein the flat-panel displays are liquid crystal displays.

5 15. The method claimed in claim 1 wherein the flat-panel displays are organic light emitting diode displays.

16. The method claimed in claim 1 wherein the flat-panel displays are plasma displays.

10

17. A tiled display comprising:

a) a plurality of flat-panel displays, each flat-panel display having a display area comprising a plurality of pixels arranged in an array and having at least one defective pixel; and

15

b) one or more faceplates located in alignment with the plurality of flat-panel displays, the one or more faceplates having a plurality of lightpipes in an array, the lightpipes having input and output end faces for transmitting light from the display areas of the flat-panel displays to a display surface of the tiled display, wherein the input end face of each of the lightpipes has an area larger than the area of one pixel of the selected flat-panel displays, and wherein each lightpipe transmits light from more than one pixel from the display area of the flat-panel displays to the display surface of the tiled display.

20

18. The tiled display claimed in claim 17, wherein the display areas of the flat-panel displays have a first size, and wherein the lightpipes transmit light from the display areas to a display surface of the tiled display having a second size larger than that of the display areas of the flat-panel displays.

25

19. The tiled display claimed in claim 18, wherein the display surface of the tiled display is parallel to the display areas of the flat-panel displays.

20. The tiled display claimed in claim 17, having individual faceplates in alignment with each selected flat-panel display, wherein adjacent edges of the individual faceplates are aligned in an array.

5 21. The tiled display claimed in claim 20 wherein aligned adjacent edges of the faceplates are inter-digitated in at least one dimension.

22. The tiled display claimed in claim 21 wherein the aligned adjacent edges of the faceplates are inter-digitated in two dimensions.

10

23. The tiled display claimed in claim 21 wherein the aligned adjacent edges of the faceplates are inter-digitated in at least one dimension by more than one row or column.

15

24. The tiled display claimed in claim 17, having multiple selected flat-panel displays in alignment with a single face plate.

20

25. The tiled display claimed in claim 24, wherein lightpipes transmitting light from pixel elements along adjacent edges of the flat panel displays are inter-digitated at the display surface of the tiled display in at least one dimension.

25

26. The tiled display claimed in claim 25 wherein the lightpipes transmitting light from pixel elements along adjacent edges of the flat panel displays are inter-digitated at the display surface of the tiled display in two dimensions.

30

27. The tiled display claimed in claim 24 wherein lightpipes transmitting light from pixel elements along adjacent edges of the flat panel displays are inter-digitated at the display surface of the tiled display in at least one dimension by more than one row or column.

28. The tiled display claimed in claim 17 wherein the defective pixels are defective in color and/or brightness.

5                   29. The tiled display claimed in claim 17 further including a controller for correcting the light output of each lightpipe to a common brightness, color, and dynamic range.

10                30. The tiled display claimed in claim 17 wherein the flat-panel displays are liquid crystal displays.

31. The tiled display claimed in claim 17 wherein the flat-panel displays are organic light emitting diode displays.

15                32. The tiled display claimed in claim 17 wherein the flat-panel displays are plasma displays.